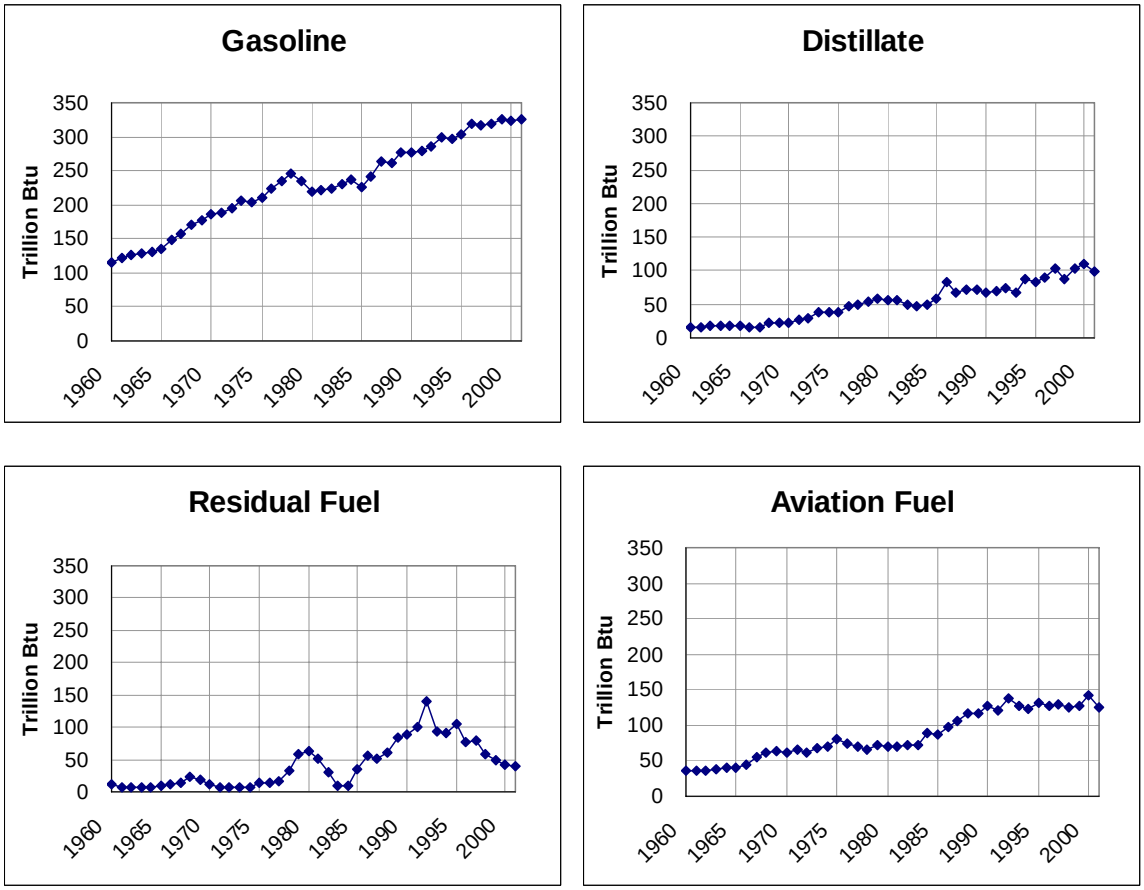
16. Transportation End-Use Energy Consumption by Fuel

GASOLINE ACCOUNTS FOR OVER HALF OF TRANSPORTATION SECTOR ENERGY USE IN WASHINGTON. WHILE WASHINGTONIANS TEND TO DRIVE MORE THAN OTHER AMERICANS, WASHINGTON'S STATUS AS A MAJOR SEAPORT AND AVIATION HUB MEANS HIGHER CONSUMPTION OF AVIATION AND MARINE FUELS AS WELL.



Sources: Energy Information Administration's State Energy Data System

Transportation End-Use Energy Consumption by Fuel				
Units:	trillion Btu			
Year	Gasoline	Distillate	Aviation Fuel	Residual Fuel
1960	115.84	14.99	35.32	10.73
1961	121.01	15.72	36.85	7.68
1962	127.34	18.19	35.98	7.18
1963	127.55	17.81	37.92	7.97
1964	130.07	19.07	39.83	7.92
1965	135.98	17.60	40.35	9.07
1966	148.44	16.33	43.95	11.73
1967	158.11	15.84	54.56	14.53
1968	169.89	21.42	61.56	23.57
1969	177.75	23.31	64.00	17.65
1970	184.97	23.04	61.10	12.73

1971	188.92	26.17	66.55	7.53
1972	195.38	29.94	61.13	6.09
1973	205.19	38.88	67.38	7.26
1974	204.65	37.63	70.50	7.92
1975	211.15	38.54	80.13	13.26
1976	223.19	46.62	74.22	14.67
1977	234.66	48.55	69.22	16.36
1978	245.04	53.59	65.83	31.85
1979	235.06	58.70	72.73	59.40
1980	220.09	55.89	69.31	63.57
1981	222.45	56.17	69.36	51.32
1982	222.99	49.10	73.01	29.63
1983	231.10	46.51	73.10	10.32
1984	237.87	48.72	88.82	10.45
1985	225.72	59.06	87.63	34.53
1986	241.11	81.96	97.24	56.15
1987	263.71	67.89	106.10	51.12
1988	261.31	71.91	117.39	60.91
1989	277.65	72.89	116.97	84.49
1990	275.91	67.62	127.60	89.46
1991	279.75	68.52	121.60	99.74
1992	285.02	73.58	137.42	139.17
1993	298.43	68.03	126.59	93.13
1994	297.41	86.80	123.29	91.72
1995	303.63	82.03	131.53	104.06
1996	318.10	88.73	128.01	77.19
1997	315.69	102.91	128.33	79.07
1998	319.39	86.58	125.74	58.75
1999	325.23	103.49	127.05	47.84
2000	324.30	109.20	141.87	41.72
2001	324.62	98.58	124.44	39.42

Motor gasoline is the dominant transportation fuel, accounting for more than half of Washington's transportation energy consumption. Except for the period between 1978 and 1985 (when prices jumped significantly), gasoline consumption has steadily increased as demand for travel has outstripped gains in vehicle fuel efficiency. Gasoline consumption in 2001 was 75% greater than in 1970.

Consumption of distillate fuels in trucks, ships, and railroads grew at a faster rate than other transportation fuels, reaching levels in 2001 that were more than four times greater than 1970. However, the magnitude of this consumption increase was much less than the increase for motor gasoline. Aviation fuel consumption more than doubled between 1970 and 2001. In both these cases, consumption growth due to increased travel was greater than the savings from efficiency improvements in the transportation fleet using distillate or aviation fuels.

Residual fuel consumption is subject to price-induced volatility because it can be stored for long periods of time without degrading. Thus purchases of this fuel dropped when prices were high, but grew when prices were relatively low.

Notes:
Motor gasoline figures include some consumption for off-road uses such as recreational vehicles and agricultural uses. No. 2 distillate, also known as diesel fuel, is used by large trucks, ships, and railroads. The only transportation use for residual fuel is by very large ships.

Aviation fuel includes kerosene-based jet fuel used by major airlines, aviation gasoline consumed by smaller airplanes, and military jet fuel.

Links:
The monthly petroleum data spreadsheet on the Washington Energy Policy website contains more recent monthly petroleum price and sales data by fuel type.
http://www.cted.wa.gov/_CTED/documents/ID_1215_Publications.xls